

**REMARKS**

Claims 1-9 are currently pending in this application (claims 10-17 being previously withdrawn). Claims 1 and 9 are amended. No prohibited new matter is added by these amendments.

**Summary of the Action**

Claims 1-9 are rejected under 35 U.S.C. § 103(e) as being unpatentable over U.S. Published Application No. 2003/0125662 to Bui (hereinafter “Bui”) as modified by U.S. Published Application No. 2003/0009106 to Sitzman (hereinafter “Sitzman”).

**Applicant’s claims are allowable over the prior art**

The Office Action rejects claims 1-9 under 35 U.S.C. § 103 as being unpatentable over Bui modified by Sitzman. These rejections are respectfully traversed.

To establish a *prima facie* case of obviousness, three criteria must be met. First, there must be some reason to modify the reference or to combine the reference teachings. Second, there must be some expectation of success. Third, the prior art references must disclose or suggest all of the claimed features. See MPEP 2143 and the May 3, 2007 letter from the PTO Deputy Commissioner for Patent Operations regarding *KSR Int'l Co. v. Teleflex, Inc.* Applicant respectfully maintains that these criteria have not been met for Bui modified by Sitzman as applied to all claims of the present invention.

As previously submitted, Bui (as described in the Abstract) discloses a medical treatment administration system for delivering a medical treatment to a patient. The system has a medical device, an electronic processor coupled to the medical device, and a sensor coupled to the processor. Based on signals from the sensor, the processor regulates the distribution of medical treatment to the patient over a period of time. However, Bui does not disclose orthogonal redundancy as in claims 1 and 9 of the present invention.

Claim 1 recites, in part, “an electronic controller including parameters of at least one of said monitored patient physiological conditions, said electronic controller interconnected with the patient health monitors, the user interface, the drug delivery controller, and the effector, wherein said electronic controller receives said signals, compares said signals to ascertain whether the

monitored data is reliable by determining if the monitors are in agreement, and controls the effector based on the results of the comparison and in accordance with the parameters.” Claim 9 recites a similar limitation. Bui discloses the use of multiple sensors in series or parallel (see Bui, paragraph 0055), but Bui does not disclose multiple monitors providing orthogonally redundant information nor does Bui disclose an electronic controller that compares multiple monitor signals to determine whether the data is reliable and then controls the system based on the results of that comparison and in accordance with the parameters.

Thus Bui also fails to teach or suggest all the elements of independent claims 1 and 9 of the present invention. Sitzman fails to remedy this deficiency as Sitzman also does not disclose, teach, or suggest an electronic controller that compares multiple monitor signals *to ascertain whether the data is reliable by determining if the monitors are in agreement* and then controls the effector based on *the results of that comparison* in accordance with the parameters.

Sitzman discloses using a selection algorithm to select the most accurate measurement of a physiological trait from multiple sensors and use that *selected output* to display or alarm. However, Applicant respectfully maintains that Sitzman does not disclose comparing signals *to ascertain whether the data is reliable by determining if the monitors are in agreement* nor using the *results of that comparison* to control effectors. The alarms/displays in Sitzman display the selected measurement while the effectors of the present invention are controlled by the results of the comparison and in accordance with the parameters. This difference can be seen, for example, through a comparison of Figures 2 and 4 of Sitzman and Figure 3 of the present invention.

Applicant submits that the selection algorithm of Sitzman does not compare the signals to determine whether the data is reliable, but rather “compares one or more of the physiological data from the data sources identified to determine which of the data sources provides a heart rate most suitable for the output data.” Sitzman, paragraph 0024. Claims 1 and 9 have been amended to highlight this difference by including the clarification that the reliability of the data is ascertained by determining whether the monitors are in agreement. Sitzman fails to disclose a determination of whether the monitors are in agreement. As previously submitted, Sitzman also fails to disclose a controller that uses the results of that comparison (the comparison to ascertain reliability by determining whether the monitors are in agreement) to control effectors.

In light of the above amendments and remarks, it is respectfully submitted that the

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outstanding rejection of the above claims as being unpatentable over Bui modified by Sitzman is improper. Thus, Applicant respectfully submits that claims 1 and 9 are allowable.

Claims 2-8 depend directly or indirectly from claim 1 and incorporate the limitations of the base claim. Thus Applicant respectfully submits that claims 2-8 are not unpatentable over Bui modified by Sitzman for at least the reasons recited with respect to claim 1 above.

Appropriate reconsideration and withdrawal of the rejection of claims 1-9 under 35 U.S.C. § 103 is respectfully requested.

Conclusion

In view of the foregoing, Applicant respectfully requests that the Examiner examine the application upon the merits, and that the above remarks be fully considered in conjunction therewith. Timely allowance of all currently pending claims and the issuance of a Notice of Allowance are requested.

Applicant has filed this Response and Amendment without increasing the number of claims above the number previously submitted or paid for. Accordingly, no additional claims fees are believed to be due at the present time. If such fees or any other fees associated with the filing of this paper are due at this time, please charge the fees to our Deposit Account No. 50-1349. Also, please credit any overpayments to Deposit Account No. 50-1349.

The Examiner is invited to contact Applicant's undersigned representative via telephone if such would expedite prosecution of this application toward allowance.

Respectfully submitted,

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